



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,507	01/25/2001	Kazunori Suemoto	1982-0162P	5320
2292	7590	01/12/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MISLEH, JUSTIN P	
		ART UNIT	PAPER NUMBER	
		2612		

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/768,507	SUEMOTO ET AL.	
	Examiner	Art Unit	
	Justin P. Misleh	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 September 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 - 4 and 11 - 20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1- 4, 11 - 14, and 16 - 20 is/are rejected.
 7) Claim(s) 15 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 25 January 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 16, 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed September 16, 2005 have been fully considered but they are not persuasive.

3. Applicant mainly argues; "Anderson merely monitors the power source voltage in general and fails to consider the voltage decrease caused by an operation of a driving motor during the initialization stage." Applicant supports this argument with the following reasoning: "the present invention looks at 'an amount of decrease', i.e., a Δ voltage, and compares this 'decrease amount' to an acceptable decrease amount, i.e., a predetermined decrease amount value, such as 0.1V, for example. Whereas, in Anderson, the voltage sensors compares the power source voltage with a threshold voltage preferably set to 5.2 volts. (see Anderson, col. 10, lines 28-37)."

4. The Examiner generally agrees with Applicant's interpretation of the operation of Anderson and Applicant's interpretation of operation of the present invention. The Examiner, however, does not agree with Applicant position of Anderson in view of the claim language.

Art Unit: 2612

Specifically, the Examiner continues to believe that the claim language is written broadly enough such that Anderson provides the necessary teachings.

5. As amended, exemplary Claim 1 now recites therein, “the controller determining during power initiation whether an amount of voltage decrease from the electric power source terminal voltage value caused by an operation of one of the lens cover driving motor and the zoom motor is less than a predetermined decrease amount value.” (emphasis added).

6. Upon power-up, Anderson’s camera operates at full power (see column 10, lines 27 – 33). Even though Anderson does not specifically point it out, it is absolutely inherent that a battery voltage decrease will occur when the camera is operating at full power. In fact as admitted by Applicant and as stated in column (lines 34 – 36), Anderson knows such a decrease will occur and constantly monitors the battery voltage level to see if the battery voltage level has decreased by an amount that causes the battery voltage level to be less a predetermined voltage threshold level for operating the camera (e.g. 5.2 volts). Clearly, Anderson at least teaches determining “an amount of voltage decrease” from the electric power source voltage value caused by an operation of the camera.

7. Applicant appears to imply that the claimed “an amount of voltage decrease” corresponds the difference voltage between a first battery voltage level corresponding to the camera prior to power initiation and a second battery voltage level corresponding to camera operation during power initiation. However, that is not the case and Applicant is reminded that the claim language does not specifically define “an amount of voltage decrease”. In fact, the Examiner considers the claimed portion to be written broadly enough such that Anderson, as described by the Examiner above, provides the necessary teaching.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1 – 3, 11 – 13, and 16 – 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshita in view of Anderson et al. The Examiner's response above is fully incorporated in these rejections.

10. For **Claim 1**, Takeshita discloses, as shown in figures 1, 8, 14(a-b), 15, and 17(a-b) and as stated in columns 5 (lines 5 – 67), 6 (lines 10 – 43), 8 (lines 5 – 65), 9 (lines 13 – 37), 10 (lines 1 – 49), 11 (lines 8 – 37), and 12 (lines 1 – 10), a digital camera (see figure 15) comprising:

- (a) a housing (fixed tube 2) having a lens barrel (comprised of first-lens group tube 3, second-lens group tube 9, and third lens group tube 15) movable along an optical axis;
- (b) a zoom lens group (first-lens group 4, 5, and 6 and second-lens group 10, 11, and 12; see column 9, lines 13 – 37) and a focus lens group (third-lens group 16; see column 10, lines 20 – 26) movable relative to one another along the optical axis in the lens barrel;
- (c) a zoom motor (DC motor 38; see column 9, lines 13 – 37; see column 10, lines 44 – 49) connected to the lens barrel (attached to driving ring 37; see figures 1 and 8) operable for moving the lens barrel to a position corresponding to a selected magnification;

Art Unit: 2612

(d) a focus motor (Stepping motor 24; see column 11, lines 8 – 12) connected to the focus lens group operable for moving the focus lens group to a focus position corresponding to the selected magnification (see column 10, lines 20 – 26 and 61 – 64);

(e) a lens cover (lens barrier 54) movable between closed (see figure 14(a)) and open (see figure 14(b)) positions for protecting at least one lens (at least the first-lens group 4, 5, and 6), and a lens cover driving motor (also the DC motor 38) connected to the lens cover (via the stepped part 37f of the driving ring 37), operable for moving the lens cover between closed and open positions (see figures 8, 14(a), and 14(b); column 6, lines 34 – 43; and column 8, lines 5 – 30);

(f) an electric power source (Not specifically shown or stated; however, it is clearly necessary for operation; and thus, it is inherent an electric power source exists);

(g) a controller (control part 74) connected to the electric power source and controlling the zoom motor and the focus motor (see column 8, lines 43 – 49), and

(h) an image sensor (image sensor 32) supported in the housing (see any of figures 1 – 4) for receiving light through the lens groups, and operable for producing data in correspondence with light received through the lens groups for image recording.

Takeshita discloses, as shown in figure 17(a-b) and stated in columns 10 (lines 32 – 64) and 11 (lines 8 – 18), that upon power-up the controller operates the lens barrel (which is retracted in a stowage position; see figure 2) to drive the DC motor (38), which drives the driving ring (37) to simultaneously move the zoom lens group (first-lens group and second-lens group) and the lens barrier (54) to a stand-by state (see figure 3). Thereafter, the controller (74) drives the stepping motor (24) to move the focus lens group (third-lens group) to a stand-by state (see

Art Unit: 2612

figure 4), wherein the camera is now ready for a photo-taking operation. Also, it is important to note that during power-up, the driving of the lens cover and driving of zoom lens group would inherently cause a decrease in the voltage of the electric power source terminal voltage value.

In addition, Takeshita also discloses, as stated in column 12 (lines 1 – 10), that the first-lens-group tube (3), the second-lens-group tube (9), and the third-lens-group tube (15) are arranged not to simultaneously move in drawing out the lens barrel to the photo-taking position or in drawing in the lens barrel to the stowage position; although, the first-lens-group tube (3), the second-lens-group tube (9), and the third-lens-group tube (15) may be made to simultaneously move, if such a sequence of operations as to prevent those tubes from colliding with each other is adopted.

However, Takeshita still does not disclose wherein the controller determining during power initiation whether an amount of voltage decrease from the electric power source terminal voltage value is less than a predetermined value, and if so, controlling the zoom motor and the focus motor to substantially overlap in operation to move the lens groups to initialization positions.

On the other hand, Anderson et al. also teach a digital camera with a controller, a zoom motor, a focus motor, and an electric power source. More specifically, as shown in figures 2, 3, 5, 6, and 7A-7B and as stated in columns 4 (lines 26 – 67), 5 (lines 1 – 67), 6 (lines 1 – 21), 7 (lines 30 – 43), 9 (lines 30 – 67), and 10 (lines 1 – 65), Anderson et al. teach that upon a power-on signal (steps 600 and 604), the voltage sensor (76) compares the power source (74) voltage with a threshold voltage, wherein if the power source voltage (74) is less than the threshold voltage, the controller changes the power state of the camera (Power State 5 → Power State 1),

Art Unit: 2612

from a high power state to a low power state, until the power source (74) voltage exceeds the threshold voltage. Furthermore, Anderson et al. teach that if the controller determines that is necessary to change the power state to Power State 3, the controller configures the zoom and focus motors (46) for sequential operation rather than simultaneous operation.

Thus, in regards to the claim language, upon power-up, Anderson's camera operates at full power (see column 10, lines 27 – 33). Even though Anderson does not specifically point it out, it is absolutely inherent that a battery voltage decrease will occur when the camera is operating at full power. In fact as admitted by Applicant and as stated in column (lines 34 – 36), Anderson knows such a decrease will occur and constantly monitors the battery voltage level to see if the battery voltage level has decreased by an amount that causes the battery voltage level to be less a predetermined voltage threshold level for operating the camera (e.g. 5.2 volts). Clearly, Anderson at least teaches determining "an amount of voltage decrease" from the electric power source voltage value caused by an operation of the camera.

As stated in column 2 (lines 42 – 47) of Anderson et al., at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include simultaneous or sequential zoom and focus motor operation upon power initiation based upon the determined voltage of a power source, as taught by Anderson et al., in the digital camera with retractable lens barrel including a lens barrier, disclosed by Takeshita, for the advantage of automatically compensating for the effects of power supply degradation so as to optimizing camera performance.

11. As for **Claim 2**, as taught above, Anderson et al. teach sequential zoom and focus motor operation if the power source voltage does not exceed a threshold value (or rather the decrease in

voltage due to the operation the motors exceeds a predetermined value). Anderson et al. does not specify which motor is to operate first, only that they operate sequentially.

12. As for **Claim 3**, as stated above, Takeshita disclose that upon power initiation, the zoom-lens group is first moved from a retracted position to a stand-by position and then the focus-lens group is moved from a retracted position to a stand-by position. Anderson et al. provides the differentiation between sequential and simultaneous motor operation based upon the determined power source voltage upon power initiation.

13. For **Claim 11**, Takeshita discloses, as shown in figures 1, 8, 14(a-b), 15, and 17(a-b) and as stated in columns 5 (lines 5 – 67), 6 (lines 10 – 43), 8 (lines 5 – 65), 9 (lines 13 – 37), 10 (lines 1 – 49), 11 (lines 8 – 37), and 12 (lines 1 – 10), a method for activating a digital camera having a zoom (4, 5, and 6) and focus lens group (15) respectively driven by a zoom and focus motor (38 and 24), a lens cover (54) driven by a lens cover driving motor (also 38), and a power source (not specifically shown or stated but inherent).

Takeshita discloses, as shown in figure 17(a-b) and stated in columns 10 (lines 32 – 64) and 11 (lines 8 – 18), that upon power-up the controller operates the lens barrel (which is retracted in a stowage position; see figure 2) to drive the DC motor (38), which drives the driving ring (37) to simultaneously move the zoom lens group (first-lens group and second-lens group) and the lens barrier (54) to a stand-by state (see figure 3). Thereafter, the controller (74) drives the stepping motor (24) to move the focus lens group (third-lens group) to a stand-by state (see figure 4), wherein the camera is now ready for a photo-taking operation. Also, it is important to note that during power-up, the driving of the lens cover and driving of zoom lens group would inherently cause a decrease in the voltage of the electric power source terminal voltage value.

Art Unit: 2612

In addition, Takeshita also discloses, as stated in column 12 (lines 1 – 10), that the first-lens-group tube (3), the second-lens-group tube (9), and the third-lens-group tube (15) are arranged not to simultaneously move in drawing out the lens barrel to the photo-taking position or in drawing in the lens barrel to the stowage position; although, the first-lens-group tube (3), the second-lens-group tube (9), and the third-lens-group tube (15) may be made to simultaneously move, if such a sequence of operations as to prevent those tubes from colliding with each other is adopted.

However, Takeshita still does not disclose wherein the controller determining during power initiation whether an amount of voltage decrease from the electric power source terminal voltage value is less than a predetermined value, and if so, controlling the zoom motor and the focus motor to substantially overlap in operation to move the lens groups to initialization positions.

On the other hand, Anderson et al. also teach a digital camera with a controller, a zoom motor, a focus motor, and an electric power source. More specifically, as shown in figures 2, 3, 5, 6, and 7A-7B and as stated in columns 4 (lines 26 – 67), 5 (lines 1 – 67), 6 (lines 1 – 21), 7 (lines 30 – 43), 9 (lines 30 – 67), and 10 (lines 1 – 65), Anderson et al. teach that upon a power-on signal (steps 600 and 604), the voltage sensor (76) compares the power source (74) voltage with a threshold voltage, wherein if the power source voltage (74) is less than the threshold voltage, the controller changes the power state of the camera (Power State 5 → Power State 1), from a high power state to a low power state, until the power source (74) voltage exceeds the threshold voltage. Furthermore, Anderson et al. teach that if the controller determines that is

Art Unit: 2612

necessary to change the power state to Power State 3, the controller configures the zoom and focus motors (46) for sequential operation rather than simultaneous operation.

Thus, in regards to the claim language, upon power-up, Anderson's camera operates at full power (see column 10, lines 27 – 33). Even though Anderson does not specifically point it out, it is absolutely inherent that a battery voltage decrease will occur when the camera is operating at full power. In fact as admitted by Applicant and as stated in column (lines 34 – 36), Anderson knows such a decrease will occur and constantly monitors the battery voltage level to see if the battery voltage level has decreased by an amount that causes the battery voltage level to be less a predetermined voltage threshold level for operating the camera (e.g. 5.2 volts).

Clearly, Anderson at least teaches determining "an amount of voltage decrease" from the electric power source voltage value caused by an operation of the camera.

As stated in column 2 (lines 42 – 47) of Anderson et al., at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include simultaneous or sequential zoom and focus motor operation upon power initiation based upon the determined voltage of a power source, as taught by Anderson et al., in the digital camera with retractable lens barrel including a lens barrier, disclosed by Takeshita, for the advantage of automatically compensating for the effects of power supply degradation so as to optimizing camera performance.

14. As for **Claims 12 and 13**, as stated in regards to Claim 11, determining whether there is a decrease a previous voltage level is less than a predetermined amount and determining whether a current voltage level exceeds a predetermined threshold value is substantively the same operation. Therefore, Anderson et al., as stated above, chooses between sequential motor

Art Unit: 2612

operation and simultaneous motor operation based upon the result of the determination. In Claim 11, if the decrease is less than a predetermined amount (or rather exceeds a threshold voltage), then simultaneous operation is chosen and, in Claim 12, if the decrease is greater than an unrelated (as claimed) predetermined value (or rather does not exceed a threshold voltage), then sequential operation is chosen. Since, Takeshita provides a clear description of the lens barrel operation, Takeshita clearly discloses, that in sequential operation the zoom motor is first driven followed by the driving of the focus motor.

15. As for **Claim 16**, Anderson et al. teach that upon a power-on signal (steps 600 and 604), the voltage sensor (76) compares the power source (74) voltage with a threshold voltage, wherein if the power source voltage (74) is less than the threshold voltage, the controller changes the power state of the camera (Power State 5 → Power State 1), from a high power state to a low power state, until the power source (74) voltage exceeds the threshold voltage, and that when the camera is connected to an AC power source, via power source (74), the controller always keeps the camera in the highest power state (Power State 5). Furthermore, Anderson et al. teach that only when the camera is in Power States 1 – 3 does the controller configure the zoom and focus motors (46) for sequential operation rather than simultaneous operation (as in Power State 5; see column 10, lines 1 – 5).

16. As for **Claim 17**, Anderson et al., as stated above, teach that that when the camera is connected to an AC power source, via power source (74), the controller always keeps the camera in the highest power state (Power State 5). Furthermore, Anderson et al. teach that upon a power-on signal (steps 600 and 604), the voltage sensor (76) compares the power source (74) voltage with a threshold voltage, wherein if the power source voltage (74) is less than the

Art Unit: 2612

threshold voltage, the controller changes the power state of the camera (Power State 5 → Power State 1), from a high power state to a low power state, until the power source (74) voltage exceeds the threshold voltage. Therefore, since the test to determine whether an AC source is connected to the camera is by constantly monitoring the power source via the voltage sensor, the controller does in fact determine whether or not an AC power source is connected to the internal power source on the basis of the power source voltage value during power initiation and a whether that voltage value becomes weaker.

17. As for **Claim 18**, Anderson et al. teach, as stated in column 7 (lines 55 – 65), the minimum voltage for the entire camera is 4.8 volts (the threshold voltage for Power State 1), since, when the camera is connected to an AC power source, the camera is in Power State 5 and since, Power State 5 is a much higher power state than Power State 1, it must be true that the threshold for Power State 5 is higher than 4.8 volts, and according, 2.9 volts (as required by the claim language).

18. **Claims 4, 14, 19, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshita in view of Anderson et al. in further view of Kijima et al.

19. As for **Claims 4, 14, 19, and 20**, while Takeshita disclose a controller, Takeshita does not disclose wherein the controller has a clock, the controller connected to the electric power source and controlling the image reading element, the controller determining an amount of electric energy available from the power source based on at least one of a power source voltage value during power initiation and a voltage decrease when one of the motors is operated, and

when the electric energy available is determined to be less than a predetermined amount, the controller setting a lower clock speed.

On the other hand, Kijima et al. also disclose a digital camera with an image sensor, a lens barrel with focus and zoom lenses connected to a motor, an electric power source, and a controller. More specifically, Kijima et al. teach, as stated in columns 10 (lines 33 – 39), 11 (lines 47 – 67), 12 (lines 1 – 44, 66, and 67), and 13 (lines 1 – 13), of connecting a battery checker (27), which checks the residual capacity of a battery power source, to a CPU (18). The CPU (18) controls the signal generator clocking device (17), according to the output of the battery checker (27), to change a sweep out frequency of the image sensor from a higher frequency (f_1) to a lower frequency (f_2) or vice versa. When the battery becomes lower than predetermined value the frequency is changed to a lower frequency ($f_1 \rightarrow f_2$). In regards to the claim language, at power-on, during initialization, the controller (with signal generator clocking device 17) constantly monitors the battery, such that when the residual battery drops below a predetermined value, the controller controls to the signal generator clocking device (17) change the operating frequency of the image sensor to a lower operating frequency; thereby effectively setting a lower clock speed.

As stated in column 13 (lines 8 – 12), at the time the invention was made, one with ordinary skill in the art would have been motivated to include a controller, with a clock, that sets a lower clock speed based upon residual battery capacity, as taught by Kijima et al., in the digital camera disclosed by Takeshita in view of Anderson et al., as a means to permit battery life extension and prevent the camera system from stopping. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have include a

Art Unit: 2612

controller, with a clock, that sets a lower clock speed based upon residual battery capacity, as taught by Kijima et al., in the digital camera disclosed by Takeshita in view of Anderson et al.

Allowable Subject Matter

20. **Claim 15** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

As for **Claim 15**, the closest prior art teaches and fairly suggests a power initiation sequence that moves a lens barrel from a retracted position to an extended position (i.e. initialization position), via a DC motor and a stepping motor, wherein the lens barrel includes a lens cover, a zoom lens group, and a focus lens group, wherein the power initiation sequence a controller determines an appropriate power state of a plurality of power states for operating the camera wherein one of said power states includes a power state for operating DC and stepping motors simultaneously.

However, the closest prior art does not teach or fairly suggest wherein the controller stops the motor for the focus lens group when the power source voltage level is less than a predetermined value during the simultaneous operation of a zoom lens group motor and the focus lens group motor.

Cited Prior Art

21. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reasons:

Art Unit: 2612

- **Taniguchi et al. (US 5 369 460)** teaches operating a zoom motor and a focus motor simultaneously based upon the results of a battery check circuit (see column 11, lines 7 – 16).
- **Akizuki et al. (US 6 980 252 B1)** teaches altering camera operations based upon an amount of decrease of battery voltage.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ngoc Yen Vu can be reached on 571.272.7320. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
January 5, 2006



NGOC-YEN VU
PRIMARY EXAMINER